

Partial Sequence of the Crystal Protein Gene

AAGTGGATTTTATATATAAGTATAAAAGTAATAAGACTTTAAATAAGTTAACGGAATACAAACCTTAATGCATTGGTTAAACATTGTAAAGTCTAAA
 GCATGGATAATGGGGCAGAAGTAAGTAGATTGTTAACACCCCTGGGTCAAAAATTGATATTTAGTAAAAATTAGTTGCACCTTTGTGCATTTTTCGATAAGAT
 CAGTCATATGTTTAAATTGTAGTAATGAAAAACAGTATTATATCATTAATGAATTGGTATCTTAATAAAAGAGATGGAGGTAACCTTATGGATAACAATCC
 MetAspAsnAsnPr
 GAACATCAATGAATGCATTECTTATAATTGTTTAAAGTAACCTGAAGTAGAAGTATTAGGTGGAGAAAGAAATAGAACTGGTTACACCCCAATCGATATT
 oAsnIleAsnGluCysIleProTyrAsnCysLeuSerAsnProGluValGluValLeuGlyGlyGluArgIleGluThrGlyTyrThrProIleAspIle
 TCCTTGTGCTAACGCAATTTCTTTTGAAGTGAATTTGTTCCGGTGGTGGATTGTTGTTAGGACTAGTTGATATAATATGGGGAATTTTGTGCTCCTCTC
 SerLeuSerLeuThrGlnPheLeuLeuSerGluPheValProGlyAlaGlyPheValLeuGlyLeuValAspIleIleTrpGlyIlePheGlyProSerG
 AATGGGACGCATTTCTTTGTACAAATTGAACAGTTAATTAAACAAAGAAATAGAAATTCGCTAGGAACCAAGCCATTTCTAGATTAGAAGGACTAAGCAA
 InTrpAspAlaPheLeuValGlnIleGluGlnLeuIleAsnGlnArgIleGluGluPheAlaArgAsnGlnAlaIleSerArgLeuGluGlyLeuSerAs
 TCTTTATCAAAATTTACGCAATCTTTTAGAGAGTGGGAAGCAGATCCTACTAATCCAGCATTAAAGAGAAGATGGGTATTCAAATTCATGACATGAAC
 nLeuTyrGlnIleTyrAlaGluSerPheArgGluTrpGluAlaAspProThrAsnProAlaLeuArgGluGluMetArgIleGlnPheAsnAspMetAsn
 AGTCCCTTACAACCGCTATTCCTCTTTTTCAGTTCAAAATTTATCAAGTTCCTCTTTTATCAGTATATGTTCAAGCTGCAAAATTTACATTTATCAGTTT
 SerAlaLeuThrThrAlaIleProLeuPheAlaValGlnAsnTyrGlnValProLeuLeuSerValTyrValGlnAlaAlaAsnLeuHisLeuSerValL
 TGAGAGATGTTTCAGTGTGGACAAAGGTGGGATTTGATGCCGGCAGTAGCAATAGTCGTTATAATGATTAACTAGGCTTATTGGCAACTATACAGA
 euArgAspValSerValPheGlyGlnArgTrpGlyPheAspAlaAlaThrSerAsnSerArgTyrAsnAspLeuThrArgLeuIleGlyAsnTyrThrAs
 TTATGCTGTACGCTGGTACAATACGGGATAGAACGTGTATGGGACCGGATCTAGAGATTTGGTAAAGTATAATCAATTTAGAAGAGAATTAACACTA
 pTyrAlaValArgTrpTyrAsnThrGlyLeuGluArgValTrpGlyProAspSerArgAspTrpValArgTyrAsnGlnPheArgArgGluLeuThrLeu
 ACTGTATTAGATATCGTCTGCTGCTCCGAATTTATGATAGTAGAAGATATCCAATTCGAACAGTTTCCCAATTAACAAGAGAAATTTATACAAACCCAG
 ThrValLeuAspIleValAlaLeuPheProAsnTyrAspSerArgArgTyrProIleArgThrValSerGlnLeuThrArgGluIleTyrThrAsnProV
 YATTAGAAAATTTTATGCTAGTTTTCGAGGCTCGGCTCAGGGCATAGAAAGAACTATTAGGAGTTACATTTGATGGATATCTTAACAGTATAACCAT
 eIleLeuGluAsnPheAspGlySerPheArgGlySerAlaGlnGlyIleGluArgSerIleArgSerSerHisLeuMetAspIleLeuAsnSerIleThrI
 CTATACGGATGCTCATAGGGGTTATTATTATGCTCAGGGCATCAATAATGGCTTCTCCTGTAGGGTTTTCGGGGCCAGAAATTCACATTTCCGCTATAT
 eTyrThrAspAlaHisArgGlyTyrTyrTrpSerGlyHisGlnIleMetAlaSerProValGlyPheSerGlyProGluPheThrPheProLeuTyr
 GCAACTATGGGAAATGCAGCTCCACAACACGATTTGTTGCTCAACTAGGTGAGGGCGTATAGAACATTATCGTCCACTTTATATAGAGACCTTTTA
 GlyThrMetGlyAsnAlaAlaProGlnGlnArgIleValAlaGlnLeuGlyGlnGlyValTyrArgThrLeuSerSerThrLeuTyrArgArgProPheA
 ATATAGGGATAAATAATCAACACTATCTGTTCTTGACGGGACAGAAATTTGCTTATGGAACCTCTCAAAATTTGCCATCCGCTGTATACAGAAAAACCGG
 snIleGlyIleAsnAsnGlnGlnLeuSerValLeuAspGlyThrGluPheAlaTyrGlyThrSerSerAsnLeuProSerAlaValTyrArgLysSerG

FIG. 1 - 1

ACCGTAGATTGGCTGGATGAAATACCGCCACAGAAACACACGCTGCCACCTAGGCAAGGATTAGTCATCGATTAAAGCATGTTTCAATGTTTCGTTCA
yThrValAspSerLeuAspGluValProProGlnAsnAsnValProProArgGlnGlyPheSerHisArgLeuSerHisValSerMetPheArgSer
CGCTTTAGTAATAGTAGTCTAAGTATAATAAGAGCTCTATGTTCTCTGGATACATCGTAGTCTGAATTTAATAATATAATTGCATCGGATAGYATTA
GlyPheSerAsnSerSerValSerIleIleArgAlaProMetPheSerTrpIleHisArgSerAlaGluPheAsnAsnIleIleAlaSerAspSerIleT
CTCAATCCCTGCAGTGAAGGAACTTTCTTTTAAATGGTCTGTAATTTTCAGGACCAGGATTACTGGTGGGACTYAGTTAGATTAAATAGTAGTGG
ArgIleProAlaValLysGlyAsnPheLeuPheAsnGlySerValIleSerGlyProGlyPheThrGlyGlyAspLeuValArgLeuAsnSerSerGI
AAATAACATTCAGAATAGAGGCTATATTGAAGTTCCAATTCACTCCCATCGACATCTACCAGATATCGAGTTCGTGTACGGTATGCTTCTGTAACCCCG
yAsnAsnIleGlnAsnArgGlyTyrIleGluValProIleHisPheProSerThrSerThrArgTyrArgValArgValArgTyrAlaSerValThrPro
ATTCACTCAACGTTAATGGGGTAATTCATCCATTTTTCCAATACAGTACCAGCTACAGCTACGTCATTAGATAATCTACAATCAAGTGATTTTGGTT
IleHisLeuAsnValAsnTrpGlyAsnSerSerIlePheSerAsnThrValProAlaThrAlaThrSerLeuAspAsnLeuGlnSerSerAspPheGlyT
ATTTTCAAGTGGCAATGCTTTTACATCTCTATTAGTAATATAGTAGGTTAGAAATTTTAGTGGGACTGCAGGAGTGATAAGACAGATTGAATT
yPheGluSerAlaAsnAlaPheThrSerSerLeuGlyAsnIleValGlyValArgAsnPheSerGlyThrAlaGlyValIleIleAspArgPheGluPh
TATTCAGTTACTGCAACACTCGAGGCTGAATATAATCTGAAAGAGCGCAGAAGCGGTAATCGGCTGTTACGCTACAAACCAACTAGGCTAAAA
elleProValThrAlaThrLeuGluValGluTyrAsnLeuGluArgAlaGlnLysAlaValAsnAlaLeuPheThrSerThrAsnGlnLeuGlyLeuLys
ACAAATGTAACGGATTATCATATTGATCAAGTGTCCAATTTAGTTACGTATTTATCGGATGAATTTTGTCTGGATGAAAGCGGAAATGTCCGAGAAG
ThrAsnValThrAspTyrHisIleAspGlnValSerAsnLeuValThrTyrLeuSerAspGluPheCysLeuAspGluLysArgGluLeuSerGluLysV
TCAACATGCGAAGGCACTCAGTCATGAACGCAATTTACTCCAAGATTCAATTTCAAGACATTAATAGGCAACCAAGCTGGTGGGCGGAAGTAC
eLysHisAlaLysAlaLeuSerAspGluArgAsnLeuLeuGlnAspSerAsnPheLysAspIleAsnArgGlnProGluArgGlyTrpGlyGlySerTh
AGGGATTACCATCCAAGGCGGATGACGTATTTAAAGAAAAATACGTCACACTATCAGGTACCTTTGATGAGTGCTATCCAACATATTTGATCAAAAA
rGlyIleThrIleGlnGlyGlyAspAspValPheLysGluAsnTyrValThrLeuSerGlyThrPheAspGluCysTyrProThrTyrLeuTyrGlnLys
ATCGATGAATCAAAATAAAGCCCTTACCCTTATCAATTAAGAGGGTATATCGAAGTAGTCAAGACTTAGAAATCTATTTAATTCGCTACAATGCAA
IleAspGluSerLysLeuLysAlaPheThrArgTyrGlnLeuArgGlyTyrIleGluAspSerGlnAspLeuGluIleTyrLeuIleArgTyrAsnAlaL
AACATGAACAGTAAATGTCCAGTACGGGTTCTTATGGCCGCTTTCAGCCCAAGTCCAATCGAAAGTGTGGAGAGCCGAATCGATGCGCCGACCA
ysHisGluThrValAsnValProGlyThrGlySerLeuTrpProLeuSerAlaGlnSerProIleGlyLysCysGlyGluProAsnArgCysAlaProH
CCTTGAATGGAATCCTGACTTAGATTGTTCTGTAGCGATGGAGAAAAGTGTGCCATCATTCCGATCATTCTCTTACACATTGATGATGATGATGATG
sLeuGluTrpAsnProAspLeuAspCysSerCysArgAspGlyGluLysCysAlaHisHisSerHisHisPheSerLeuAspIleAspValGlyCysThr
GACTTAAATGAGGACCTAGGTGTATGGTGATCTTTAAGATTAAAGCCCAAGTGGGACGCAAGCTAGGCAATCTAGAGTTTCTGCAAGACAAACCAT
AspLeuAsnGluAspLeuGlyValTrpValIlePheLysIleLysThrGlnAspGlyHisAlaArgLeuGlyAsnLeuGluPheLeuGluGluLysProL
TAGTAGGACAAAGCCTAGCTCGTGTGAAAAGAGCGGACAAAAATGCGAGAGACAAACGTGAAAAATGGAAATGGGAAACAAATATCGTTTATAAGAGGC
euValGlyGluAlaLeuAlaArgValLysArgAlaGluLysLysTrpArgAspLysArgGluLysLeuGluTrpGluThrAsnIleValTyrLysGluAl
AAAGAACTCTGATGCTTTATTTGTAACCTCTCAATATGATCAATTACAAGCGGATACGAATATTGCCATGATTCATGCGCGAGATAAACGCTGTCAT
eLysGluSerValAspAlaLeuPheValAsnSerGlnTyrAspGlnLeuGlnAlaAspThrAsnIleAlaMetIleHisAlaAlaAspLysArgValHis
AGCATTGAGAGGCTT
SerIleArgGluAlaT

3116

FIG. 1 - 2

over

260574

Map of pTi15955 T-DNA

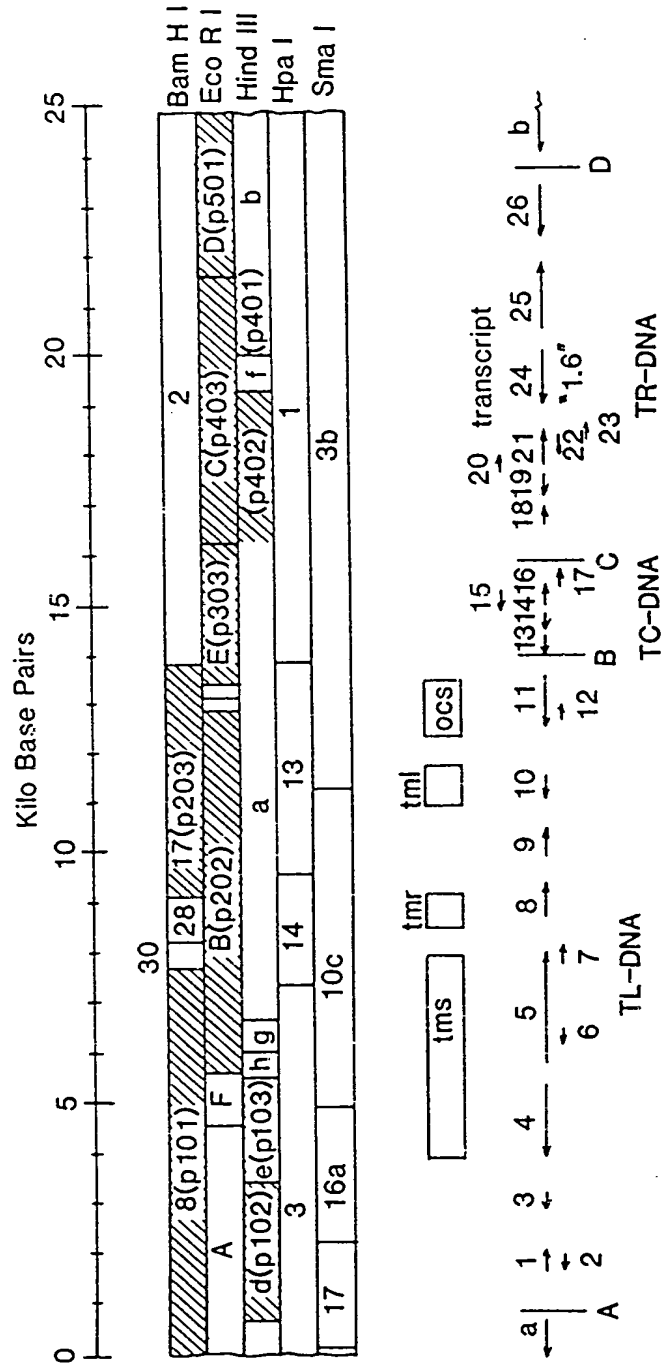


FIG. 2

over

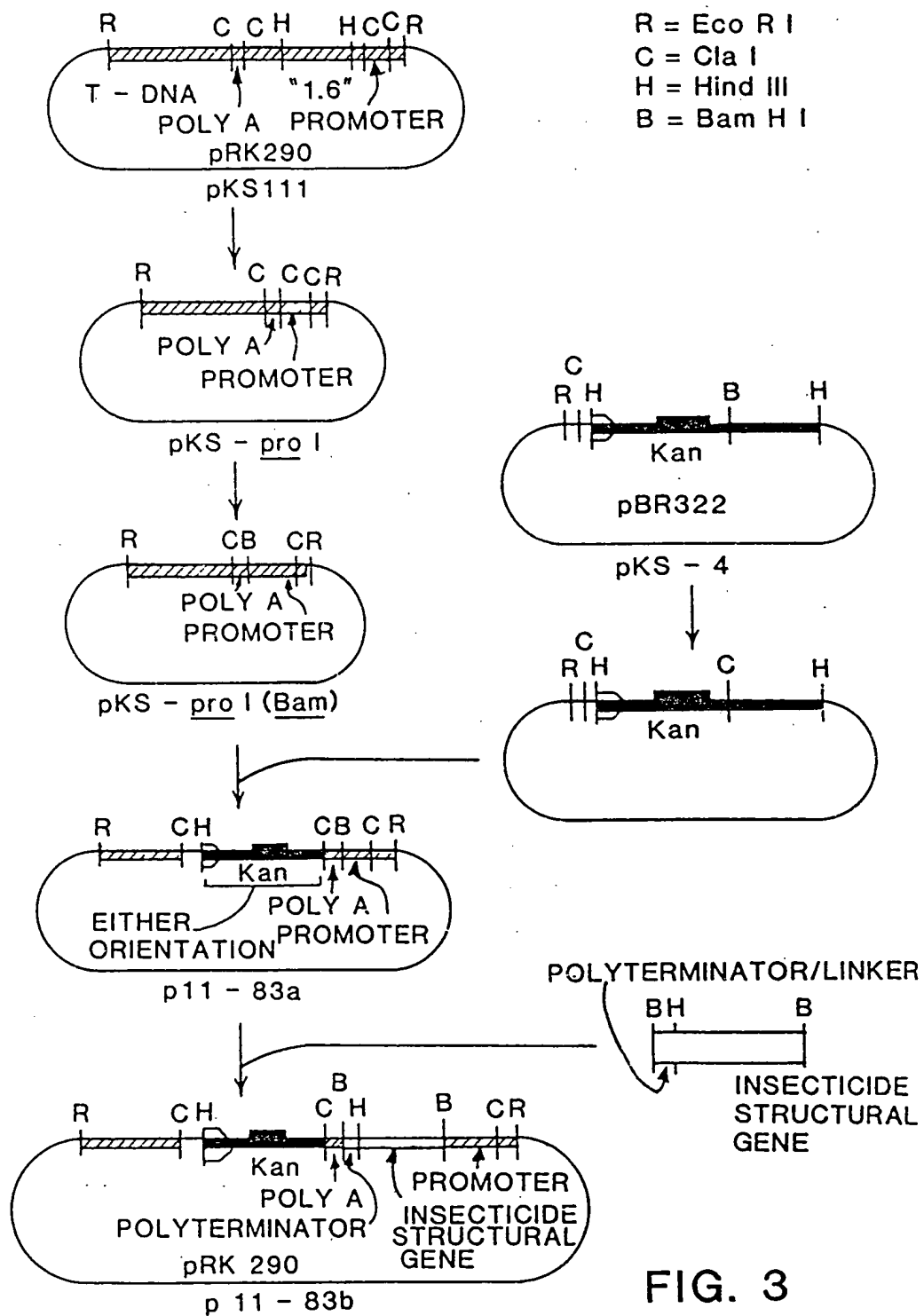


FIG. 3